FIG. 1
(PRIOR ART)

FIG. 2
(PRIOR ART)

100 V

335, V_f

315

340, V_b

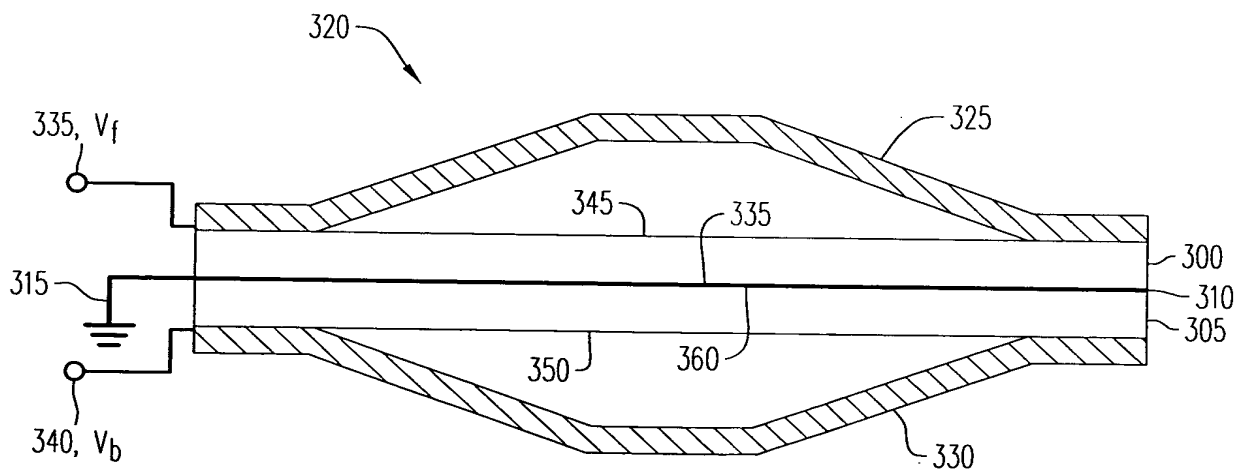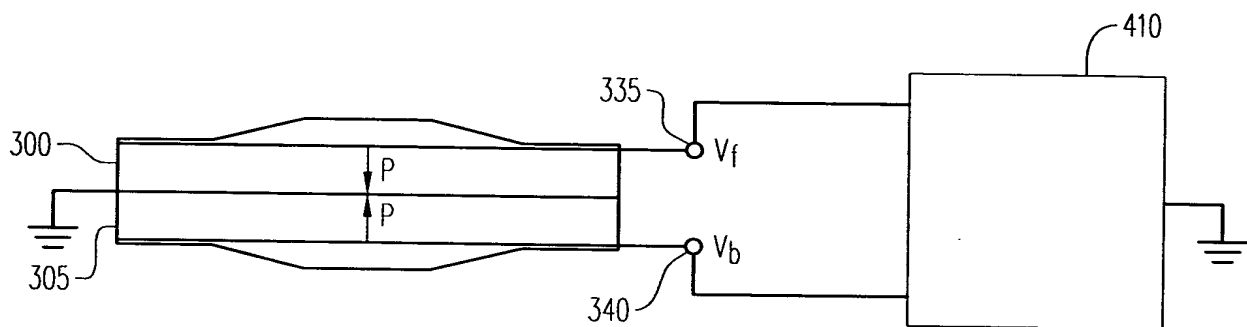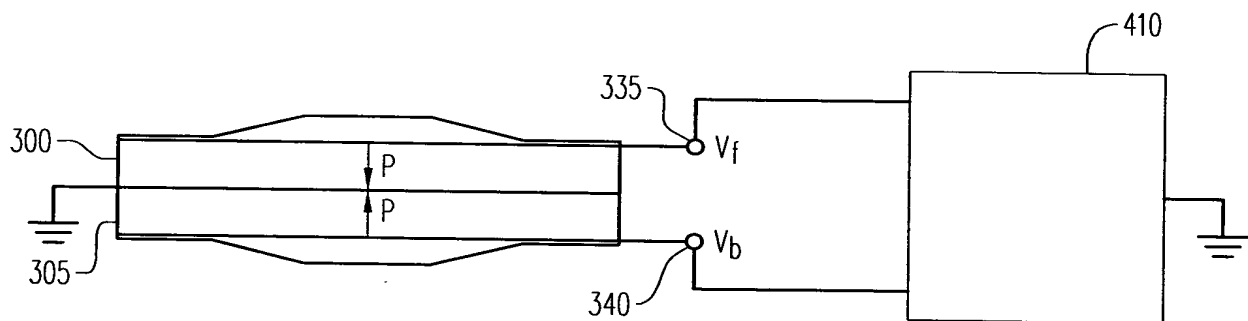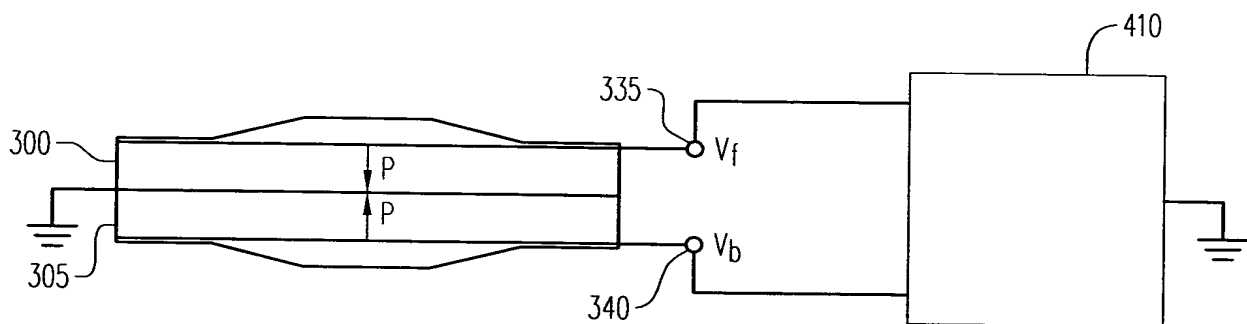**FIG. 3**

MONOPOLE. (IN PHASE. SAME AMPLITUDE), $V_b = V_f = V_m$, $\varphi = 0$
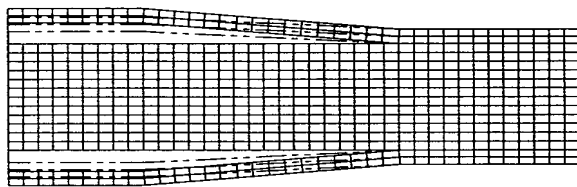
FIG. 4A

DIPOLE. (OUT OF PHASE. SAME AMPLITUDE), $V_b = -V_d$, $V_f = V_d$, $\varphi = \pi$

FIG. 4B

CARDIOID. $V_b / V_f = (1-R)/(1+R)$, WHERE $R = TVR_m / TVR_d$, $0 < \varphi < \pi$
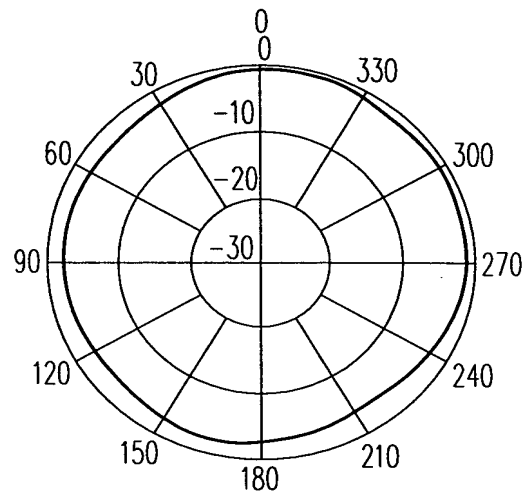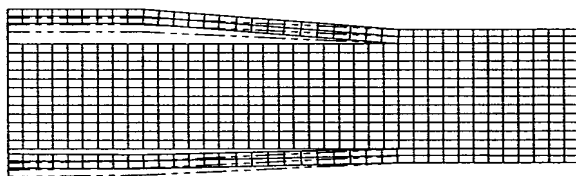
FIG. 4C

MONOPOLE MODE
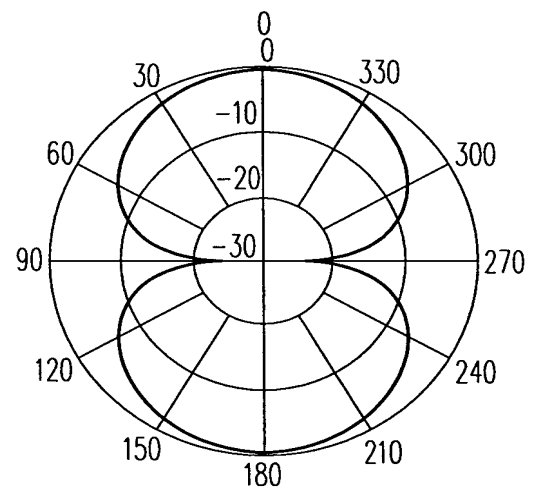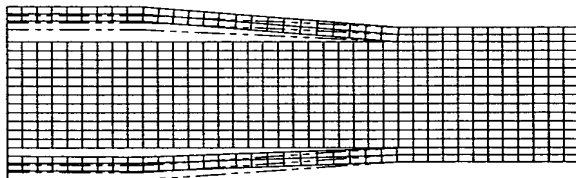
FIG. 5A

DIPOLE MODE

FIG. 5B

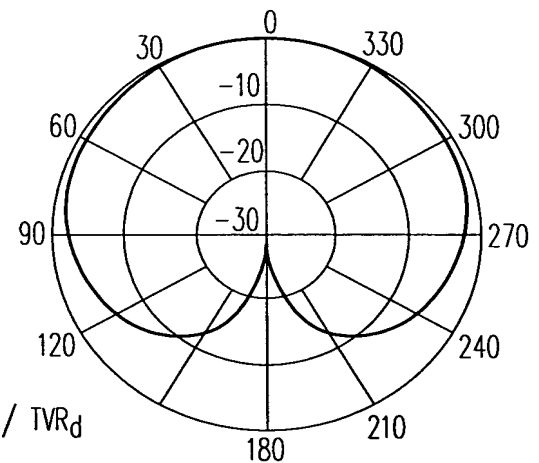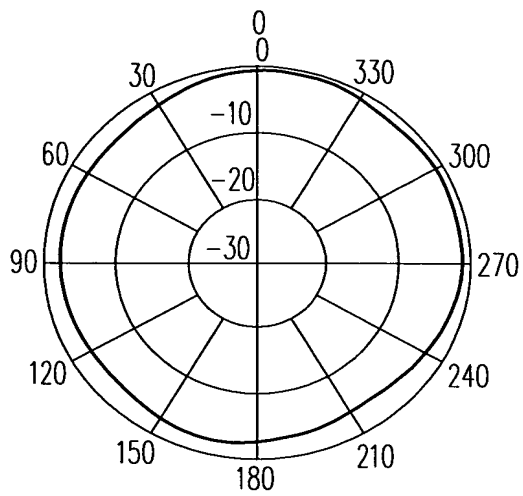CARDIOID MODE. $V_b / V_f = (1-R)/(1+R)$, WHERE $R = TVR_m / TVR_d$
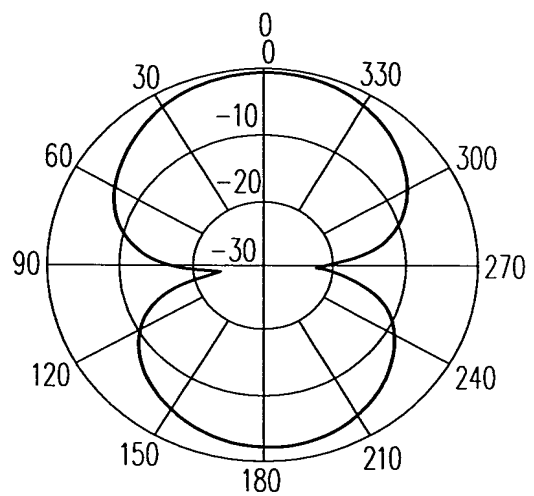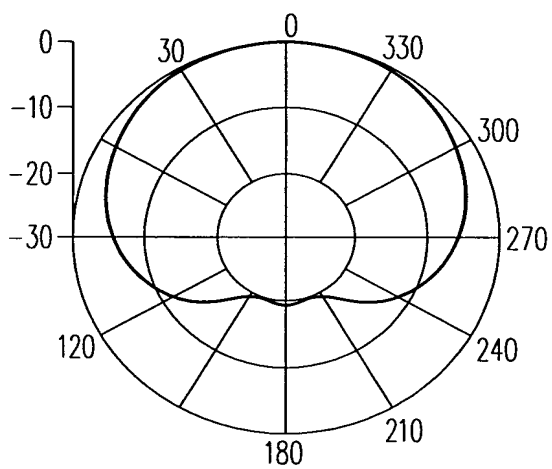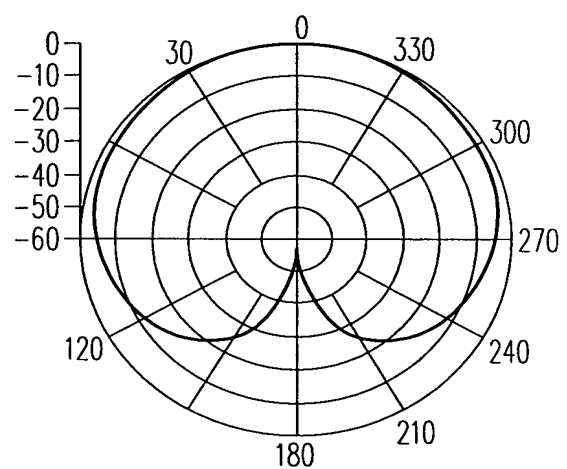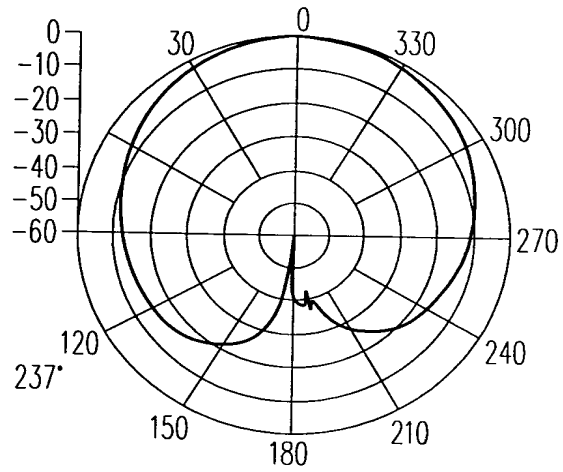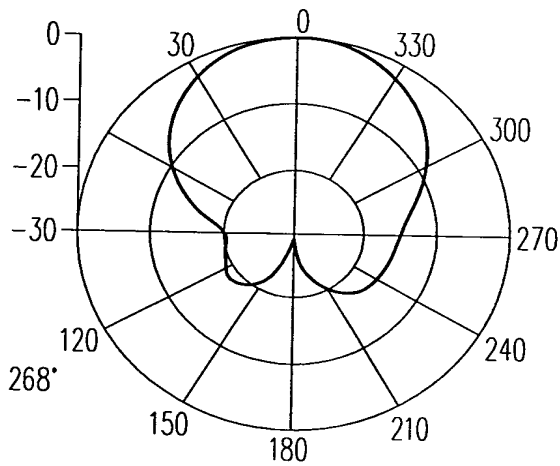
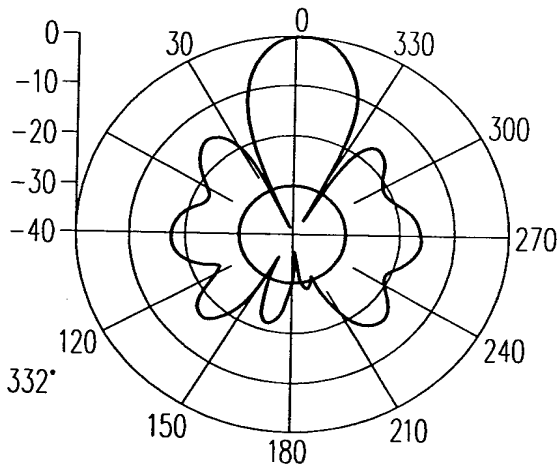## FIG. 5C

FIG. 6A

FIG. 6B

FIG. 7A

FIG. 7B

15kHz, V_f = 100 V, V_b = 55V, φ = 237°

FIG. 8A

20kHz, V_f = 100 V, V_b = 38V, φ = 268°

FIG. 8B

80kHz, V_f = 98 V, V_b = 100V, φ = 332°

FIG. 8C

900

320

FIG. 9